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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,177	06/06/2001	Joseph Lincoln Komen	24484	7704

28624 7590 09/08/2004

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EXAMINER

WHITE, EVERETT NMN

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/875,177	Applicant(s) KOMEN ET AL.	
	Examiner EVERETT WHITE	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-29,64-76,78 and 79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-29,64-76,78 and 79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The amendment filed July 22, 2004 has been received, entered and carefully considered. The amendment affects the instant application accordingly:
 - (A) Claims 1-7, 30-63 and 77 have been canceled;
 - (B) Comments regarding Office Action have been provided drawn to:
 - (i) 101 double patenting rejection, rendered moot by new ground of rejection under obviousness type double patenting rejection.
2. Claims 8-29, 64-76, 78 and 79 are pending in the case.
3. The text of those sections of title 35, U. S. Code not included in this action can be found in a prior Office action.

Finality Withdrawn

4. The finality of the rejection in the last Office action has been withdrawn for the reasons disclosed below.

Claim Objections

5. Claims 8-12, 15, 17, 19, 21, 27 and 64 are objected to because of the following informalities: In Claims 8-12, 15, 17, 19, 21, 27 and 64, line 2 of each claim, the term "it" should be changed to - - the carbohydrate - -. Appropriate correction is required.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 8-29, 64-76, 78 and 79 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-28 and 57 of U.S. Patent No. 6,524,348 to Jewell et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 8-29, 64-76, 78 and 79 of the instant application are drawn to a method of making a carboxylated carbohydrate product which comprises oxidizing a carbohydrate compound by reacting the compound in an aqueous system with a sufficient amount of a primary oxidant selected from the group consisting of hindered heterocyclic oxammonium salts in which the carbon atoms adjacent the oxammonium nitrogen lack .alpha.-hydrogen substitution, the corresponding amines, hydroxylamines, and nitroxides of these oxammonium salts, and mixtures thereof, in which the nitroxides is 2,2,2',2',6,6 6', 6' octa-methyl-4,4'-bipiperidiny-1,1'doxy di-radical, and a secondary oxidant selected from chlorine dioxide and latent sources of chlorine dioxide in a sufficient amount to induce an increase in carboxyl substitution in the carbohydrate of at least 2 meq/100 g. Claims 1-28 and 57 of the Jewell et al patent set forth a similar method of making fibrous carboxylated cellulose that comprises oxidizing cellulose fibers in an aqueous alkaline suspension with a sufficient amount of a primary oxidant selected from the group consisting of heterocyclic nitroxides stable under aqueous alkaline conditions in which the carbon atoms adjacent the nitroxide nitrogen lack hydrogen substitution, the corresponding oxammonium salts, amines, hydroxylamines of these compounds, and mixtures thereof, and a sufficient amount of a secondary oxidant to induce an increase in carboxyl substitution in the cellulose of at least 2 meq/100g. See Claim 5 of the Jewell et al patent wherein the nitroxide is selected as 2,2,2',2',6,6 6', 6' octa-methyl-4,4'-bipiperidiny-1,1'doxy di-free radical and Claims 26-28 wherein the secondary oxidant is selected as hypohalite salt, or more specifically sodium hypochlorite, which is a latent source of chlorine dioxide under the reaction conditions set forth in the instantly claimed method. (The fact that sodium hypochlorite is a latent source of chlorine

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dioxide is evident in the paragraph bridging columns 5 and 6 in Mason et al's U.S. Pat. No. 4,889,654, wherein it is disclosed reaction conditions for generating chlorine dioxide in a solution which include a solution comprising water soluble metal hypochlorite. See column 6, line 15 of the Mason et al patent wherein sodium hypochlorite is specifically recited. Also see column 14, lines 5-9 of the Mason et al patent wherein this function is more clearly set forth.) The instant claims differ from the Jewell et al patent by claiming a method of making a carboxylated carbohydrate product wherein the Jewell et al patent sets forth a method of making a carboxylated cellulose. See page 9 of the instant specification which shows that the carbohydrate products of the instant claims include cellulose in which the α -cellulose content does not exceed 90% as recited in the claims of the Jewell et al patent. One having ordinary skill in the art would have been motivated to employ the process of the prior art with the expectation of obtaining the desired product because the skilled artisan would have expected the analogous starting materials to react similarly. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of Applicants invention to replace the carbohydrate product of the instant claims with the cellulose of the Jewell et al patent in view of their closely related structures and the resulting expectation of similar papermaking properties.

8. Applicant's arguments with respect to Claims 8-29, 64-76, 78 and 79 have been considered but are moot in view of the new ground(s) of rejection.

Summary

9. All the pending claims (Claims 8-29, 64-76, 78 and 79) are rejected.

Examiner's Telephone Number, Fax Number, and Other Information

10. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at www.uspto.gov and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-

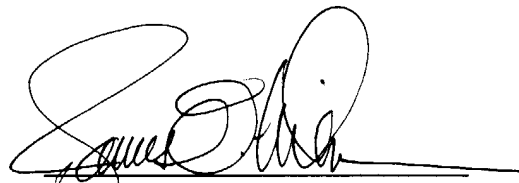
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0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reach on (571) 272-0661. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.


E.White


James O. Wilson
Supervisory Primary Examiner
Technology Center 1600